

Additional file 3: Proteins that specific for the *Sphingomonadales* but missing in one or more species

A. Proteins Uniquely Present in Three of the Four Sphingomonadales Genera (Novosphingobium, Erythrobacter, Sphingomonas or Sphingopyxis)

Saro_0166	YP_495449	Hypothetical	Saro_2373	YP_497643	Hypothetical
Saro_0206	YP_495488	Hypothetical	Saro_2384 ³	YP_497654	Hypothetical
Saro_0269	YP_495551	Hypothetical	Saro_2385 ³	YP_497655	Hypothetical
Saro_0968	YP_496247	Hypothetical	Saro_2523	YP_497793	Hypothetical
Saro_0881	YP_496160	Hypothetical	Saro_2643	YP_497913	Hypothetical
Saro_1030	YP_496309	Hypothetical	Saro_2670	YP_497940	Hypothetical
Saro_1159	YP_496438	Hypothetical	Saro_3064	YP_498333	Hypothetical
Saro_1239	YP_496518	Hypothetical	Saro_3117	YP_498386	Hypothetical
Saro_1363	YP_496641	Hypothetical	Saro_3124	YP_498393	Hypothetical
Saro_1502	YP_496777	Hypothetical	Saro_3131	YP_498400	Hypothetical
Saro_1594	YP_496868	Hypothetical	Saro_3144	YP_498413	Hypothetical
Saro_1978	YP_497252	Hypothetical	Saro_3302	YP_498571	Hypothetical
Saro_2194	YP_497467	Hypothetical			

B. Proteins Unique Present in *Novosphingobium* and either *Sphingomonas* or *Erythrobacter*

Gene ID	Accession Number	Function	Gene ID	Accession Number	Function
Saro_0916	YP_496195	Hypothetical	Saro_2126	YP_497399	Hypothetical
Saro_1581	YP_496855	Hypothetical	Saro_2154	YP_497427	Hypothetical
Saro_1633	YP_496907	Hypothetical	Saro_2185	YP_497458	Hypothetical
Saro_2089	YP_497362	Hypothetical	Saro_2188	YP_497461	Hypothetical
Saro_3076	YP_498345	Hypothetical	Saro_2270	YP_497541	Hypothetical
Saro_3091	YP_498360	Hypothetical	Saro_2271	YP_497542	Hypothetical
Saro_3311	YP_498580	Hypothetical	Saro_2562	YP_497832	Hypothetical
Saro_0027	YP_495310	Hypothetical	Saro_2563	YP_497833	Hypothetical
Saro_0243	YP_495525	Hypothetical	Saro_2781	YP_498051	Hypothetical
Saro_0592	YP_495873	Hypothetical	Saro_2856	YP_498126	Hypothetical
Saro_1004	YP_496283	Hypothetical	Saro_3056	YP_498325	Hypothetical
Saro_1294	YP_496572	Hypothetical	Saro_3159	YP_498428	Hypothetical
Saro_1767	YP_497041	Hypothetical	Saro_3222	YP_498491	Hypothetical
Saro_1911	YP_497185	TadE-like	Saro_3248	YP_498517	Hypothetical
Saro_1959	YP_497233	Hypothetical	Saro_3323	YP_498592	Hypothetical
Saro_2035	YP_497308	Hypothetical	Saro_3326 ¹	YP_498595	Hypothetical

¹ Caulobacter crescentus CB15 is found to be significant